

1 **ABSTRACT OF THE DISCLOSURE**

2 A sterilizing air filter has a casing, a base, multiple spray devices, a
3 cover, multiple fans and multiple bent tubes. The casing has an inlet and an outlet.
4 The base is mounted in the casing and has multiple chambers in the base.
5 Disinfectant can be poured into the chambers. The spray devices respectively
6 mounted in the chambers and the cover fitted on the base are both used for
7 spraying disinfectant in the chamber. The multiple fans and the multiple bent
8 tubes are used for spreading the sprayed disinfectant between the different
9 chambers and out to the air. The sterilizing air filter not only sucks the air into the
10 microbial filter for sterilization and filtration but also automatically sprays the
11 disinfectant out to the air to kill microbes in the air.